

## CLAIMS

What is claimed is:

- 5        1    A method for providing a business-to-business network service for applications used by service providers, the method comprising the steps of:
- (a)    providing a central application capable of communicating with at least two applications over a public network;
  - (b)    providing a repository database for storing customer information that spans more than one of the service providers; and
  - (c)    allowing the applications to query the repository database through the central application, thereby making the customer information accessible to each of the applications.
- 10        2    The method of claim 1 wherein step (b) further includes the step of: receiving different customer information from each of the applications.
- 15        3    The method of claim 1 wherein the service providers comprise video rental chains.
- 20        4    The method of claim 3 wherein step (b) further includes the steps of:
- (i)    storing movie title information in the repository database; and

- (ii) making the movie title information accessible by the applications, thereby eliminating a need to manually enter information at the rental stores.

5 The method of claim 3 wherein step (b) further includes the step of: receiving the movie title information from movie distributors.

6 The method of claim 1 further including the step of:

- (d) providing a notification service that allows the applications to subscribe to automatic notifications triggered by updates to the customer information in the repository database.

7 The method of claim 1 further including the step of: registering the applications as clients with the network service.

8 The method of claim 7 further including the step of: making access to the repository database secure through encryption, and during a registration process, generating authentication keys to validate future data exchange requests made by the applications.

9 The method of claim 2 wherein step (b) further includes the step of: receiving customer information from each of the applications that includes one or more of; a list of business customers, a customer wish list, customer rental history, and customer evaluations.

10 The method of claim 1 wherein step (c) further includes the step of: receiving queries from the applications and analyzing data in the repository database to uncover patterns and relationships relating to the customers' rental activities and histories.

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11 The method of claim 10 wherein step (c) further includes the step of: returning in response to the queries one or more of a recommended list, an order list, a user rating list, and a list of user infractions.

12 The method of claim 1 wherein the service providers provide online retail services.

13 A network service for applications used by service providers comprising:  
a central application capable of communicating with at least two applications over a public network; and  
a repository database for storing customer information that spans more than one of the service providers, wherein the applications may query the repository database through the central application, thereby making the customer information accessible to each of the applications.

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14 The network service of claim 13 wherein each of the applications submit different customer information.

15 The network service of claim 14 wherein the service providers are video rental chains.

16 The network service of claim 15 wherein the repository database stores movie title information that is accessible by all of the applications, thereby eliminating a need to manually enter information by the rental chains.

17 The network service of claim 16 further including a request servlet, a notify servlet, and a data access process.

18 The network service of claim 17 wherein there is no direct customer interaction with the central application.

19 The network service of claim 18 wherein the applications include point-of-sale applications, business-to-consumer applications, and business-to-business applications.

20 The network service of claim 19 wherein the protocol of the network service is HTTP Servlets.

21 The network service of claim 20 wherein the central application communicates with the applications using XML messages.

22 The network service of claim 21 wherein the XML messages are contained in Simple Object Access Protocol (SOAP) envelopes.

23 The network service of claim 22 wherein the repository database further includes;

a first component for storing information regarding each of the service providers,

a second component for storing information regarding each of the rental customers, and

a third component for storing data that describes movie titles.

24 The network service of claim 23 wherein the network comprises the Internet.

25 The network service of claim 13 wherein the service providers provide online retail services.

26 A method for providing a business-to-business network service for rental chains, the method comprising the steps of:

(a) allowing the rental chains to register as clients of the network service through respective rental chain applications;

(b) receiving customer information from each of the rental applications and storing the customer information in a repository database, wherein the customer information spans more than one rental chain;

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- (c) allowing the rental applications to access the customer information from repository database; and
  - (d) providing a notification service that allows the rental chain applications to subscribe to automatic notifications triggered by updates to the customer information in the repository database.

27 The method of claim 26 further including the steps of:

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- (e) receiving movie title information and storing the movie title information in the repository database; and
  - (f) making the movie title information accessible by the rental chain applications, thereby eliminating a need to manually enter information at the rental stores.

28 The method of claim 27 wherein step (e) further includes the step of: receiving the movie title information from movie distributors.

29 The method of claim 28 wherein step (b) further includes the step of:

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- (i) receiving customer information from each of the rental applications that includes one or more of; a list of business customers, a customer wish list, customer rental history, and customer evaluations of movie titles.

30 The method of claim 29 wherein step (a) further includes the step of:

- (i) making access to the repository database secure through encryption, and during a registration process, generating authentication keys to validate future data exchange requests made by the rental chain applications.

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31 The method of claim 30 wherein step (c) further includes the step of:

- (i) receiving queries from the rental applications and analyzing data in the repository database to uncover patterns and relationships relating to the customers' rental activities and histories.

32 The method of claim 31 wherein step (c) further includes the step of:

- (ii) returning in response to the queries one or more of a recommended list, an order list, a user rating list, and a list of user infractions.

33 The method of claim 32 wherein step (b) further includes the step of:

- (i) storing the customer information in XML format, and communicating between the rental applications and the network service using XML messages.

34 The method of claim 33 wherein step (b) further includes the step of: containing the XML messages in Simple Object Access Protocol (SOAP) envelopes.

35 A computer-readable medium containing program instructions for providing a business-to-business network service for rental applications used by rental chains, the program instructions for:

- (a) providing a central application capable of communicating with at least two rental chain applications over a public network;
- (b) providing a repository database for storing customer information that spans more than one of the rental chains; and
- (c) allowing the rental chain applications to query the repository database through the central application, thereby making the customer information accessible to each of the rental chain applications.

36 The computer-readable medium of claim 35 wherein instruction (b) further includes the instruction of: receiving different customer information from each of the rental applications.

37 The computer-readable medium of claim 35 wherein instruction (b) further includes the instructions of:

- (i) storing movie title information in the repository database; and
- (ii) making the movie title information accessible by the rental chain applications, thereby eliminating a need to manually enter information at the rental stores.



38 The computer-readable medium of claim 37 wherein instruction (b) further includes the instruction of: receiving the movie title information from movie distributors.

5 39 The computer-readable medium of claim 35 further including the instruction of:

(d) providing a notification service that allows the rental chain applications to subscribe to automatic notifications triggered by updates to the customer information in the repository database.

10 40 The computer-readable medium of claim 35 further including the instruction of: registering the rental applications as clients with the network service.

15 41 The computer-readable medium of claim 40 further including the instruction of: making access to the repository database secure through encryption, and during a registration process, generating authentication keys to validate future data exchange requests made by the rental chain applications.

20 42 The computer-readable medium of claim 36 wherein instruction (b) further includes the instruction of: receiving customer information from each of the rental applications that includes one or more of; a list of business customers, a customer wish list, customer rental history, and customer evaluations of movie titles.

43 The computer-readable medium of claim 35 wherein instruction (c) further includes the instruction of: receiving queries from the rental applications and analyzing data in the repository database to uncover patterns and relationships relating to the customers' rental activities and histories.

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44 The computer-readable medium of claim 43 wherein instruction (c) further includes the instruction of: returning in response to the queries one or more of a recommended list, an order list, a user rating list, and a list of user infractions.

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45 The computer-readable medium of claim 35 further including the step of storing customer credential reports in the repository database, allowing customers to request their credential reports directly from the central application to challenge the report's source/validity.

46 The computer-readable medium of claim 35 wherein the service providers provide online retail services.

47 A method for enhancing the display of a movie title list, the method comprising the steps of:

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- (a) displaying a list of movie titles to a user; and
- (b) displaying indicators adjacent to each movie title on the list that allow the user to take action with respect to a particular movie title, thereby

eliminating the need for the user to navigate to a separate movie title page in order to take the action.

48 The method of claim 47 further including the step of displaying a combination of indicators from among a group comprising:

- (i) an in stock or out of stock indicator,
- (ii) an already rented/purchased indicator,
- (iii) an order command,
- (iv) an add to wish-list command, and
- (v) an add to shopping cart command.

49 The method of claim 48 further including the step of providing icons as the indicators, wherein a click on the icon initiates a corresponding action.

50 The method of claim 49 further including the step of using customer historical data to display the indicators.

51 The method of claim 50 further including the step of using customer historical data that spans multiple rental chains.

52 The method of claim 51 further including the step of storing the customer historical data in a repository database that spans multiple rental chains and this is accessible by the multiple rental chains.